



Academic Progression in Nursing (APIN)

## **MA Nurse of the Future Nursing Core Competencies© 2016 Implementation Survey: Summary Brief**

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Submitted to the Massachusetts Action Coalition

*The MA Action Coalition (MAAC) is a partnership of the MA department of Higher Education and the Organization of Nurse Leaders of MA & RI*

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## Executive Summary

The purpose of this survey is to assess the state of implementation of the Massachusetts Nurse of the Future Nursing Core Competencies (NOFNCC) within academic and practice settings. The Massachusetts Action Coalition Nurse of Future Competency Team, as part of the MA Academic Progression in Nursing (APIN) grant from the Robert Wood Johnson Foundation, worked with the University of Massachusetts Donahue Institute to design a survey. This is the second administration of the survey (the first was in 2014) and includes comparison of similar groups of organizations/institutions over time. The NOFNCC were developed by the MA Nurse of the Future Competency Committee as an outcome of the 2006 working session hosted by the MA Department of Higher Education and the MA Organization of Nurse Executives.

### Survey Highlights:

- Overall implementation/use of the NOFNCC/RN for both academic institutions and practice organizations increased from 2014 to 2016: from 78% to 89% for academic institutions and from 43% to 56% for practice organizations.
- The percentage of respondents who reported that their school was integrating the NOFNCC/RN into their curriculum increased for both 2-year colleges and 4-year colleges/universities: from 70% to 83% for 2-year colleges and from 82% to 95% for 4-year colleges/universities.
- There was a large increase in the percentage of public institutions that integrated the NOFNCC/RN into their curriculum (from 69% to 90%).
- The percentage of respondents who reported that their work setting was using the NOFNCC/RN to guide practice increased for both academic medical centers or hospitals (47% in 2014 and 55% in 2016) and community hospitals (42% in 2014 and 56% in 2016).
- There was a large increase in the percentage of non-profit organizations that used the NOFNCC/RN to guide practice (from 42% to 57%).

### Discussion:

The survey highlights several differences between the academic and practice sectors, as well as more specific differences among institutions within the academic sector. According to respondents, the NOFNCC were being integrated into curriculum at academic institutions at a much higher rate (89%) than they were being used within practice organizations (56%). Usage among practice organizations, however, increased slightly more over the two-year period (from 43% to 56% or 13 percentage points) than integration into curriculum among academic institutions (from 78% to 89% or 11 percentage points). This likely speaks to the development of the NOFNCC having been primarily among academic institutions and, consequently, a closer “fit” to concepts and systems in place in that sector.

Among academic institutions, the NOFNCC were integrated within curriculum at a higher rate among four-year colleges and universities than two-year colleges (something that may be related to the competencies being focused on RNS rather than LPNs). There was very little difference in usage of the competencies between academic medical centers/hospitals and community hospitals.

While there is some difference in ordering, respondents from academic institutions and practice organizations generally reported the same specific competencies as being implemented the most. The top competencies being integrated or used in 2016 were:

Competency	Academic Institutions	Practice Organizations
Communication	91%	70%
Evidence-based Practice	88%	70%
Patient Centered Care	88%	85%
Professionalism	85%	85%
Safety	88%	85%
Teamwork and Collaboration	82%	81%

Among competencies that were being integrated or used to a lesser extent, some differences occurred between academic institutions and practice organizations. Specifically, among academic institutions Leadership (70%) was integrated into curriculum at a higher rate than among practice organizations (48%). On the other hand, among practice organizations Quality Improvement (67%) was used at a higher rate than among academic institutions (55%).

In terms of barriers to implementation, respondents from academic institutions were more likely to report no barriers to integration (35%) than practice organizations were for usage (15%). The most frequently cited barrier among academic respondents was that they didn't understand how the NOFNCC are different from existing national standards (26%) while the most frequently cited barrier among practice respondents was that they didn't have the time or resources for implementation (40%).

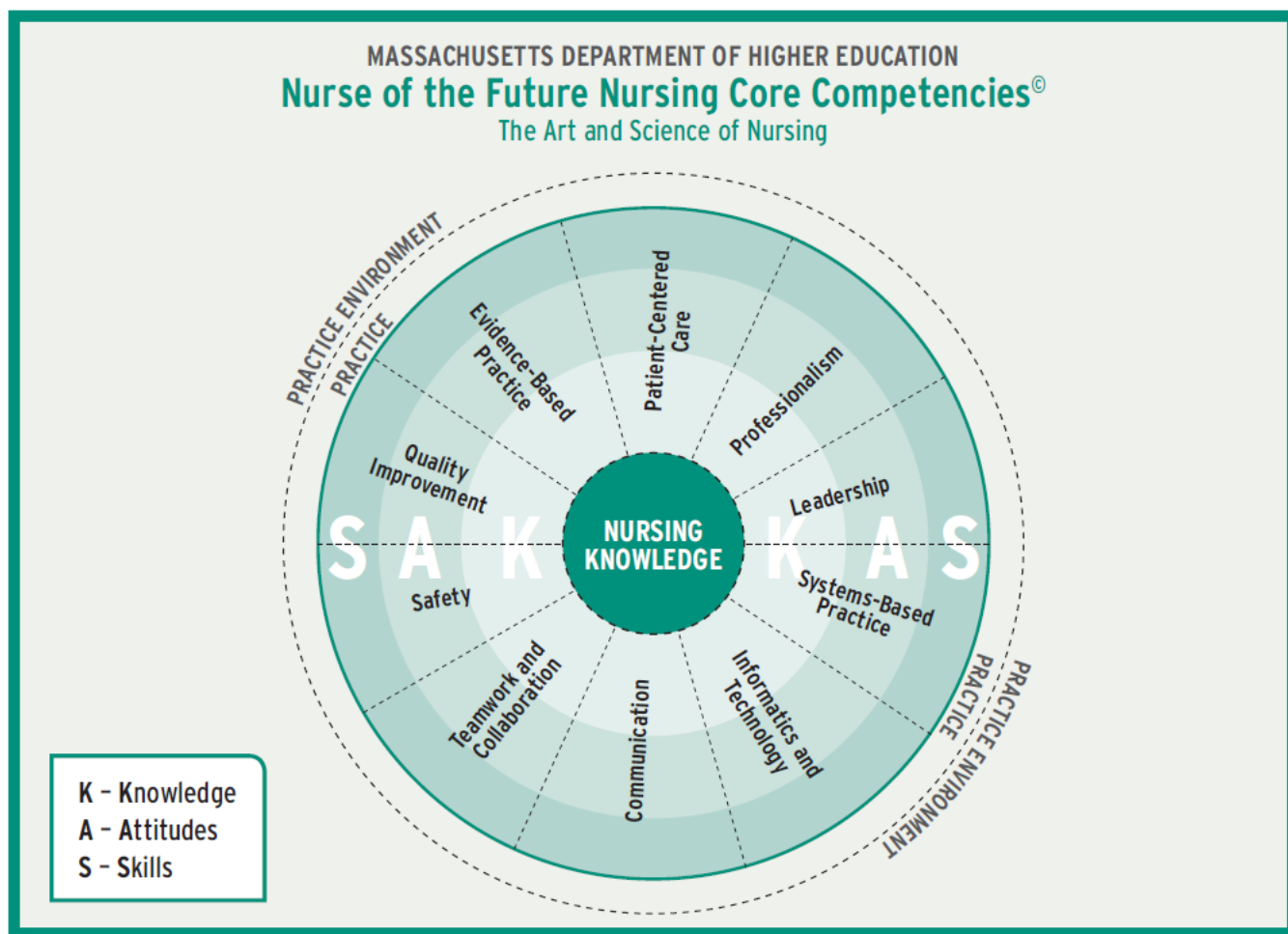
Other frameworks used in academic and practice settings varied widely. Among respondents from all academic institutions, QSEN (Quality Safety Essentials in Nursing) was the most commonly cited other framework used to guide curriculum development at 72% (70% for two-year colleges and 75% for four-year colleges/universities). However, this hides a substantial difference with regard to use of the AACN baccalaureate essentials which were used by 94% of respondents from four-year colleges/universities and only 9% of two-year colleges. The most commonly cited other framework among respondents from practice organizations was the Joint Commission/National Patient Safety Goals (79%).

#### Recommendations:

- Continue work on integration and usage of the NOFNCC. There is still room for growth among both academic institutions and practice organizations.
- Develop toolkits that are specific to academic and practice contexts. Currently the Implementation Toolkit is the same for both. There are enough differences in climate and context between the two sectors to need more specialized/tailored information in materials, especially with regard to addressing perceived barriers to implementation.
- Strengthen outreach related to the LPN competencies. There are significant differences between two-year colleges and four-year colleges/universities related to (a) their level of integration of the NOFNCC into their curriculum, and (b) other frameworks used to guide curriculum development. These likely have to do with a focus on LPNs for many two-year institutions.
- Develop outreach materials that are specific to less commonly integrated/used competencies to boost their implementation.
- Strengthen outreach to long-term care facilities as they are largely absent from the current implementation landscape. Again, this may require development of specialized outreach materials and/or strengthening outreach related to the LPN competencies.

## Background

The MA Nurse of the Future Nursing Core Competencies (MA NOFNCC) were developed by the MA Nurse of the Future Competency Committee as an outcome of the 2006 working session *Creativity and Connections: Building the Framework for the Future of Nursing Education and Practice* hosted by the MA Department of Higher Education and the MA Organization of Nurse Executives. A three-year process of reviewing the literature; analyzing state, national, and international practice and academic standards; projected patient demographics and health care needs in MA; and, gathering feedback resulted in 2010 with a list of ten MA NOF Nursing Core Competencies as well as the MA NOFNCC Model pictured below:



The intent of the current survey was to document among MA healthcare institutions the extent to which (if any) the MA NOFNCC have been integrated into the curriculum in academic settings or are being used in practice settings.

## Methodology

The 2016 administration of the survey paralleled the 2014 survey administration. The survey of Nurse Leaders (NL) was conducted during the spring of 2016. The survey was initially opened at the end of April and an invitation to participate was sent out via a mailing list managed by the Academic Progression In Nursing (APIN) staff at the MA Department of Higher Education. After the survey was open for three weeks, the results were examined and a decision was made to keep

the survey open further and resend the invitation to gather more responses. After the survey was open an additional two weeks the results were examined again and discovered to explicitly lack responses from long-term or skilled care facility staff. A new, targeted invitation was then sent to a different list of just long-term or skilled care facility NLs. After leaving the survey open for individuals from this sector to respond, the survey was closed (at the end of June). As there were significant duplications between the mailing lists, and the mailing lists were managed by different groups, it was not possible to calculate an overall response rate.

The 2014 survey was based on an earlier one that was substantially longer and conducted by the Organization of Nurse Leaders of MA & RI's Academic Practice Integration Committee (APIC). It was a specific request of the APIN staff that the survey be substantially shortened in order to help increase the response rate and facilitate analysis of the results. Because of a wide difference in the response populations and differences in the formulation of questions, results of the two surveys are not comparable. The 2016 survey was mostly identical to the 2014 one with the following exceptions:

- 1) Small edits to the descriptions of each individual Competency so that they were aligned with updated public versions.
- 2) The addition of questions in 2016 regarding possible barriers to implementation of the Competencies (one version for academic respondents and one version for practice respondents).
- 3) The addition of questions in 2016 regarding familiarity with the new LPN version of the Competencies (one version for academic respondents and one version for practice respondents).
- 4) The addition of “/RN” to the NOFNCC abbreviation, except for the questions about LPN competencies which were abbreviated NOFNCC/LPN. In between the two survey administrations, a version of the Competencies was developed for LPNs. The addition of the “/RN” extension was needed in 2016 in order to clarify the version to which a question referred.

In 2014, a total of 118 respondents answered at least one question on the survey. Of these, 31% (or 37) were respondents from academic institutions and 69% (or 81) were respondents from practice organizations. In 2016, a total of 122 respondents answered at least one question on the survey. Of these, 54% (or 66) were from academic institutions and 46% (or 56) were from practice organizations. Table 1A shows further details regarding the total number of respondents.

It should also be noted that in between the two survey administrations, the majority of 4-year public colleges in the MA state system were promoted to university status. As a result, what had been separate categories in 2014 have been combined in 2016 to maintain consistency.

**Table 1A: In what kind of organization / setting do you work? All respondents**

		2014		2016	
		# Responses	%	# Responses	%
<b>Academic Institutions</b>		<b>37</b>	<b>31%</b>	<b>66</b>	<b>54%</b>
	2-Year College	10	27%	23	35%
	4-Year College / University	17	46%	22	33%
	Other / Unknown	10	27%	21	32%
	Private Institution	13	35%	17	26%
	Public Institution	21	57%	43	65%
	Unknown	3	8%	6	9%

Table 1A: In what kind of organization / setting do you work? All respondents - Continued					
Practice Organizations		81	69%	56	46%
	Academic Medical Center or Hospital	15	19%	20	36%
	Community Hospital	31	38%	32	57%
	Long-term or Skilled Care Facility	27	33%	1	2%
	Other / Unknown	8	10%	3	5%
	For-Profit Organization	18	22%	9	16%
	Non-Profit Organization	61	75%	47	84%
	Unknown	2	2%	0	0%
Total		118		122	

As can be seen in Table 1A above, there are significant differences between the 2014 and 2016 respondent samples, primarily having to do with a sizeable portion of the 2014 sample coming from long-term or skilled care facilities while there was only one respondent from this sector in 2016. Furthermore, the nature of other/unknown categories vary considerably from 2014 to 2016. These differences are significant enough to prevent comparability of the whole samples for the two years. In order to be able to present comparable results, respondents who fell into the following categories were removed from the sample used for analysis in this report:

- 1) Respondents who identified themselves as affiliated with a long-term or skilled care facility: As already mentioned, while this population had a robust number of respondents in 2014, only one person in 2016 identified as being affiliated with it. This amounted to there being no sample in 2016 which could be used for comparison.
- 2) Respondents who self-identified as belonging to an “other” institution, or did not respond to the question about affiliation resulting in a categorization of them as “unknown”: One of the directives for this analysis was to provide recommendations for future action steps. The researcher determined that development of such recommendations was dependent on knowledge of respondents’ affiliations and inclusion of these individuals for whom affiliations were not known only served to cloud results.

The nature of the sample of respondents used in the analysis for this report is detailed in Table 1B.

Table 1B: In what kind of organization / setting do you work? Respondents included in analysis					
		2014		2016	
		# Responses	%	# Responses	%
Academic Institutions		27	37%	44	46%
	2-Year College	10	37%	23	52%
	4-Year College / University	17	63%	21	48%
	Private Institution	11	41%	14	32%
	Public Institution	16	59%	30	68%



**Table 1B: In what kind of organization / setting do you work? Respondents included in analysis - Continued**

<b>Practice Organizations</b>		<b>46</b>	<b>63%</b>	<b>52</b>	<b>54%</b>
Academic Medical Center or Hospital		15	33%	20	38%
Community Hospital		31	67%	32	62%
For-Profit Organization		3	7%	8	15%
Non-Profit Organization		43	93%	44	85%
<b>Total</b>		<b>73</b>		<b>96</b>	

## Results

Table 2 shows the number/percentage of academic respondents who reported on their school's integration of the MA Nurse of the Future Nursing Core Competencies (MA NOFNCC/RN) into their curriculum. Table 3 shows the number/percentage of practice respondents who reported on their work setting's use of the MA NOFNCC to guide practice. In 2014, 78% of academic respondents reported that their institution was integrating the NOFNCC/RN into their curriculum and 43% of practice respondents reported that their organization was using the NOFNCC/RN to guide practice. In 2016, these percentages had increased to 89% and 56%, respectively.

Among academic institutions, the percentage of respondents who reported that their school was integrating the NOFNCC/RN into their curriculum increased for both 2-year colleges and 4-year colleges/universities: from 70% to 83% for 2-year colleges and from 82% to 95% for 4-year colleges/universities. There was also a large increase in the percentage of public institutions that integrated the NOFNCC/RN into their curriculum (from 69% to 90%). The percentage of respondents from private institutions who reported integration decreased, however, from 91% to 86%.

**Table 2: Is your school integrating the Nurse of the Future Nursing Core Competencies for RNs (NOFNCC/RN) into their curriculum?**

	2014							2016						
	Yes #	Yes %	No #	No %	DK #	DK %	Total	Yes #	Yes %	No #	No %	DK #	DK %	Total
<b>Academic Institutions</b>	<b>21</b>	<b>78%</b>	<b>4</b>	<b>15%</b>	<b>2</b>	<b>7%</b>	<b>27</b>	<b>39</b>	<b>89%</b>	<b>3</b>	<b>7%</b>	<b>2</b>	<b>5%</b>	<b>44</b>
2-Year College	7	70%	3	30%	0	0%	10	19	83%	3	13%	1	4%	23
4-Year College / University	14	82%	1	6%	2	12%	17	20	95%	0	0%	1	5%	21
Private Institution	10	91%	0	0%	1	9%	11	12	86%	2	14%	0	0%	14
Public Institution	11	69%	4	25%	1	6%	16	27	90%	1	3%	2	7%	30

Among practice organizations, the percentage of respondents who reported that their work setting was using the NOFNCC/RN to guide practice increased for both academic medical centers or hospitals (47% in 2014 and 55% in 2016) and community hospitals (42% in 2014 and 56% in 2016). There was also a large increase in the percentage of non-profit organizations that used the NOFNCC/RN to guide practice (from 42% to 57%). The percentage of respondents from for-profit organizations who reported use decreased, however, from 67% to 50%.

**Table 3: Is your organization / work setting using the Nurse of the Future Nursing Core Competencies for RNs (NOFNCC/RN) to guide practice?**

	2014							2016						
	Yes #	Yes %	No #	No %	DK #	DK %	Total	Yes #	Yes %	No #	No %	DK #	DK %	Total
<b>Practice Organizations</b>	<b>20</b>	<b>43%</b>	<b>18</b>	<b>39%</b>	<b>8</b>	<b>17%</b>	<b>46</b>	<b>29</b>	<b>56%</b>	<b>18</b>	<b>35%</b>	<b>5</b>	<b>10%</b>	<b>52</b>
Academic Medical Center or Hospital	7	47%	8	53%	0	0%	15	11	55%	6	30%	3	15%	20
Community Hospital	13	42%	10	32%	8	26%	31	18	56%	12	38%	2	6%	32
For-Profit Organization	2	67%	0	0%	1	33%	3	4	50%	4	50%	0	0%	8
Non-Profit Organization	18	42%	18	42%	7	16%	43	25	57%	14	32%	5	11%	44

Table 4 shows how/where respondents reported their academic institutions were integrating the NOFNCC/RN. In 2016, the most common place of implementation was in course content (85% of respondents), followed by course objectives (79%) and annual curriculum review and update and clinical evaluation tool (both 65%). The is a shift from 2014 when annual curriculum review and update was the most frequently reported place of implementation (84%) followed by course content (79%) and course objectives (74%). This shift makes sense insofar as some individuals may see the integration of the NOFNCC/RN into as annual curriculum review and update as a one point in time action (e.g., something can only be integrated during the first year—after that, it is already there).

In 2016, the most common place of integration of the NOFNCC/RN for 2-year colleges was in course content and course objectives (both 89%). For 4-year colleges / universities is was just in course content (81%).

**Table 4: Where and/or how is your school integrating the NOFNCC/RN?**

		Total Aca. Inst.		2-Year Coll		4 Yr Coll/Univ		Private		Public	
		#	%	#	%	#	%	#	%	#	%
<b>2014</b>	Annual curriculum review and update	16	84%	5	83%	11	85%	6	75%	10	91%
	Clinical evaluation tool	10	53%	3	50%	7	54%	5	63%	5	45%
	Course content	15	79%	3	50%	12	92%	7	88%	8	73%
	Course evaluations	9	47%	2	33%	7	54%	4	50%	5	45%
	Course objectives	14	74%	5	83%	9	69%	6	75%	8	73%
	Curriculum development workshops	8	42%	2	33%	6	46%	2	25%	6	55%
	Faculty orientation	7	37%	3	50%	4	31%	3	38%	4	36%
	Senior practicum	8	42%	2	33%	6	46%	3	38%	5	45%
	<b>Responded to the question</b>	<b>19</b>		<b>6</b>		<b>13</b>		<b>8</b>		<b>11</b>	
<b>2016</b>	Annual curriculum review and update	22	65%	13	72%	9	56%	5	50%	17	71%
	Clinical evaluation tool	22	65%	14	78%	8	50%	4	40%	18	75%
	Course content	29	85%	16	89%	13	81%	8	80%	21	88%
	Course evaluations	14	41%	10	56%	4	25%	3	30%	11	46%
	Course objectives	27	79%	16	89%	11	69%	6	60%	21	88%
	Curriculum development workshops	13	38%	9	50%	4	25%	4	40%	9	38%
	Faculty orientation	14	41%	9	50%	5	31%	4	40%	10	42%
	Senior practicum	13	38%	2	11%	11	69%	7	70%	6	25%
	<b>Responded to the question</b>	<b>34</b>		<b>18</b>		<b>16</b>		<b>10</b>		<b>24</b>	

Table 5 shows where and/or how respondents reported their practice organizations were using the NOFNCC/RN. In 2016, the most common area of use was in staff orientation (74% of respondents), followed by competency programs and preceptor training (both 59%) and nursing councils (33%). This is a shift from 2014 when competency programs were the most common area of use (76%) followed by staff orientation (67%) and nursing councils (43%). This shift makes sense



in that it represents use of the NOFNCC/RN in a more systematic and comprehensive aspect of professional development than earlier.

In 2016, the most common area of use of the NOFNCC/RN for academic medical centers or hospitals was in competency programs (73%). For community hospitals it was in staff orientation (81%).

**Table 5: Where and/or how is your organization / work site using the NOFNCC/RN?**

		Total Prac. Org.		Aca. Med. Ctr. Or Hosp.		Community Hospital		For-Profit		Non-Profit	
		#	%	#	%	#	%	#	%	#	%
<b>2014</b>	Competency Programs	16	76%	4	67%	12	80%	1	33%	15	83%
	Job Descriptions	8	38%	2	33%	6	40%	0	0%	8	44%
	Nursing Councils	9	43%	1	17%	8	53%	2	67%	7	39%
	Performance Evaluations	7	33%	1	17%	6	40%	0	0%	7	39%
	Preceptor Training	7	33%	1	17%	6	40%	0	0%	7	39%
	Senior Student Practicum	2	10%	1	17%	1	7%	0	0%	2	11%
	Staff Orientation	14	67%	5	83%	9	60%	2	67%	12	67%
	Workshops	5	24%	0	0%	5	33%	0	0%	5	28%
<b>Responded to Question</b>		<b>21</b>		<b>6</b>		<b>15</b>		<b>3</b>		<b>18</b>	
<b>2016</b>	Competency Programs	16	59%	8	73%	8	50%	3	75%	13	57%
	Job Descriptions	8	30%	3	27%	5	31%	0	0%	8	35%
	Nursing Councils	9	33%	4	36%	5	31%	1	25%	8	35%
	Performance Evaluations	8	30%	2	18%	6	38%	0	0%	8	35%
	Preceptor Training	16	59%	6	55%	10	63%	2	50%	14	61%
	Senior Student Practicum	3	11%	2	18%	1	6%	1	25%	2	9%
	Staff Orientation	20	74%	7	64%	13	81%	2	50%	18	78%
	Workshops	5	19%	3	27%	2	13%	0	0%	5	22%
<b>Responded to Question</b>		<b>27</b>		<b>11</b>		<b>16</b>		<b>4</b>		<b>23</b>	

Table 6 shows the degree to which each individual Competency is being integrated into academic institutions as reported by respondents. In 2016, the Competency which was integrated to the greatest extent was communication (91%), followed by evidence-based practice and patient centered care and safety (all at 88%) then professionalism (85%). This represented a shift from 2014 when professionalism and safety were the Competencies integrated to the greatest extent (both at 100%), followed by communication and patient centered care (both at 95%) and then by evidence-based practice (89%). This is a potentially interesting shift in that it could represent moving from internal communication about the Competencies (professionalism and safety areas emphasized) to external communication (communication about the Competencies is emphasized).

It should be noted that there are many differences in the ratings for 2-year colleges versus 4-year colleges/universities. Because of the small sample size, it cannot be determined whether these differences are statistically significant, but they may prove to be informative of action steps that are particular to a type of institution.

**Table 6: Please rate the extent to which each Competency is being integrated into your school / curriculum: Usually or Always**

		Total Aca. Inst.		2-Year Coll		4 Yr Coll/Univ		Private		Public	
		#	%	#	%	#	%	#	%	#	%
2014	Communication	18	95%	5	83%	13	100%	8	100%	10	91%
	Evidence-based Practice	17	89%	4	67%	13	100%	7	88%	10	91%
	Infomatics and Technology	14	74%	4	67%	10	77%	6	75%	8	73%
	Leadership	13	68%	3	50%	10	77%	4	50%	9	82%
	Patient Centered Care	18	95%	5	83%	13	100%	8	100%	10	91%
	Professionalism	19	100%	6	100%	13	100%	8	100%	11	100%
	Quality Improvement	8	42%	2	33%	6	46%	2	25%	6	55%
	Safety	19	100%	6	100%	13	100%	8	100%	11	100%
	Systems-based Practice	8	42%	2	33%	6	46%	2	25%	6	55%
	Teamwork and Collaboration	14	74%	5	83%	9	69%	4	50%	10	91%
	<i>All Overall</i>	16	84%	3	50%	13	100%	7	88%	9	82%
<b>Responded to the question</b>		<b>19</b>		<b>6</b>		<b>13</b>		<b>8</b>		<b>11</b>	
2016	Communication	30	91%	16	89%	14	93%	9	90%	21	91%
	Evidence-based Practice	29	88%	15	83%	14	93%	10	100%	19	83%
	Infomatics and Technology	20	61%	11	61%	9	60%	6	60%	14	61%
	Leadership	23	70%	12	67%	11	73%	7	70%	16	70%
	Patient Centered Care	29	88%	15	83%	14	93%	9	90%	20	87%
	Professionalism	28	85%	14	78%	14	93%	9	90%	19	83%
	Quality Improvement	18	55%	12	67%	6	40%	5	50%	13	57%
	Safety	29	88%	16	89%	13	87%	8	80%	21	91%
	Systems-based Practice	14	42%	9	50%	5	33%	4	40%	10	43%
	Teamwork and Collaboration	27	82%	15	83%	12	80%	8	80%	19	83%
	<i>All Overall</i>	26	79%	15	83%	11	73%	6	60%	20	87%
<b>Responded to the question</b>		<b>33</b>		<b>18</b>		<b>15</b>		<b>10</b>		<b>23</b>	

Table 7 shows the degree to which each individual Competency is being used in practice institutions as reported by respondents. In 2016, the Competency which was used to the greatest extent was patient centered care, professionalism, and safety (all at 85%), followed by teamwork and collaboration (81%) then communication and evidence-based practice (both at 70%). This represented a shift from 2014 when safety was the Competency used to the greatest extent (96%), followed by communication (91%) and then by patient centered care, professionalism, and quality improvement (all at 83%). This is interesting in comparison to the level of integration among academic institutions and may be reflective of the two groups being at different “life stages” in the implementation/use of the Competencies where academic institutions are further along than practice organizations.

It should be noted that there are many differences in the ratings for academic medical centers or hospitals versus community hospitals. Because of the small sample size, it cannot be determined whether these differences are statistically significant, but they may prove to be informative of action steps that are particular to a type of organization.

**Table 7: Please rate the extent to which each Competency is being implemented in your organization / work setting: Usually or Always**

		Total Prac. Org.		Aca. Med. Ctr. Or Hosp.		Community Hospital		For-Profit		Non-Profit	
		#	%	#	%	#	%	#	%	#	%
2014	Communication	21	91%	6	100%	15	88%	2	100%	19	90%
	Evidence-based Practice	17	74%	5	83%	12	71%	2	100%	15	71%
	Infomatics and Technology	18	78%	6	100%	12	71%	2	100%	16	76%
	Leadership	14	61%	5	83%	9	53%	1	50%	13	62%
	Patient Centered Care	19	83%	6	100%	13	76%	1	50%	18	86%
	Professionalism	19	83%	6	100%	13	76%	1	50%	18	86%
	Quality Improvement	19	83%	5	83%	14	82%	1	50%	18	86%
	Safety	22	96%	6	100%	16	94%	2	100%	20	95%
	Systems-based Practice	11	48%	3	50%	8	47%	1	50%	10	48%
	Teamwork and Collaboration	18	78%	6	100%	12	71%	2	100%	16	76%
	<i>All Overall</i>	15	65%	3	50%	12	71%	2	100%	13	62%
	<b>Responded to Question</b>	<b>23</b>		<b>6</b>		<b>17</b>		<b>2</b>		<b>21</b>	
2016	Communication	19	70%	9	82%	10	63%	3	75%	16	70%
	Evidence-based Practice	19	70%	7	64%	12	75%	3	75%	16	70%
	Infomatics and Technology	17	63%	7	64%	10	63%	3	75%	14	61%
	Leadership	13	48%	5	45%	8	50%	2	50%	11	48%
	Patient Centered Care	23	85%	8	73%	15	94%	3	75%	20	87%
	Professionalism	23	85%	5	45%	15	94%	3	75%	20	87%
	Quality Improvement	18	67%	6	55%	12	75%	2	50%	16	70%
	Safety	23	85%	9	82%	14	88%	4	100%	19	83%
	Systems-based Practice	10	37%	4	36%	6	38%	1	25%	9	39%
	Teamwork and Collaboration	22	81%	9	82%	13	81%	4	100%	18	78%
	<i>All Overall</i>	14	52%	6	55%	8	50%	0	0%	14	61%
	<b>Responded to Question</b>	<b>27</b>		<b>11</b>		<b>16</b>		<b>4</b>		<b>23</b>	

Tables 8 and 9 show what respondents reported as barriers to the implementation or use of the NOFNCC/RN. The most frequently reported barrier to implementation among academic institutions was that they didn't understand how the NOFNCC/RN were different from existing national standards. The most frequently reported barrier to use among practice organizations was that they didn't have the time or resources for implementation. In general, a higher percentage of academic institutions reported no barriers to implementation compared to practice institutions.

**Table 8: Please describe any barriers to your school's overall use of the NOFNCC/RN. (Choose all that apply)**

		Total Aca. Inst.		2-Year Coll		4 Yr Coll/Univ		Private		Public	
		#	%	#	%	#	%	#	%	#	%
2016	No Barriers	8	35%	4	31%	4	40%	4	50%	4	27%
	Don't understand how they are different from existing national standards	6	26%	3	23%	3	30%	3	38%	3	20%
	Don't have the time or resources for implementation	4	17%	2	15%	2	20%	1	13%	3	20%
	Other	7	30%	6	46%	1	10%	1	13%	6	40%
	<b>Responded to Question</b>	<b>23</b>		<b>13</b>		<b>10</b>		<b>8</b>		<b>15</b>	

**Table 9: Please describe any barriers to your organization's / work setting's overall use of the NOFNCC/RN. (Choose all that apply)**

		Total Prac. Org.		Aca. Med. Ctr. Or Hosp.		Community Hospital		For-Profit		Non-Profit	
		#	%	#	%	#	%	#	%	#	%
<b>2016</b>	No Barriers	3	15%	0	0%	3	25%	0	0%	3	18%
	Don't understand how they are different from existing national standards	4	20%	2	25%	2	17%	1	33%	3	18%
	Don't have the time or resources for implementation	8	40%	3	38%	5	42%	1	33%	7	41%
	Other	8	40%	4	50%	4	33%	0	0%	8	47%
	<b>Responded to Question</b>	<b>20</b>		<b>8</b>		<b>12</b>		<b>3</b>		<b>17</b>	

In both 2014 and 2016, the most frequently reported other framework used to guide curriculum among academic institutions was QSEN (Quality Safety Essentials in Nursing) followed by the AACN Baccalaureate Essentials. However, it should be noted that there were wide variations in use of various other frameworks according to institution type (2-year college versus 4-year college/university) and sector (private versus public). As explained earlier, because of the small number of responses, statistical significance for these differences cannot be calculated, but the nature of the variations could be very useful in tailoring outreach initiatives to specific institutions.

**Table 10: What other framework(s) does your school use to guide curriculum development? (Choose all that apply)**

		Total Aca. Inst.		2-Year Coll		4 Yr Coll/Univ		Private		Public	
		#	%	#	%	#	%	#	%	#	%
<b>2014</b>	AACN Baccalaureate Essentials	13	57%	0	0%	13	100%	7	78%	6	43%
	Benner's Carnegie Report	4	17%	2	20%	2	15%	2	22%	2	14%
	Institute of Medicine Report	9	39%	1	10%	8	62%	3	33%	6	43%
	NLN Education Competency Model	5	22%	4	40%	1	8%	2	22%	3	21%
	Nursing Theorist / Other Model	3	13%	3	30%	0	0%	0	0%	3	21%
	QSEN (Quality Safety Essentials in Nursing)	17	74%	4	40%	13	100%	8	89%	9	64%
	Other	3	13%	2	20%	1	8%	0	0%	3	21%
	<b>Responded to the question</b>	<b>23</b>		<b>10</b>		<b>13</b>		<b>9</b>		<b>14</b>	
<b>2016</b>	AACN Baccalaureate Essentials	17	44%	2	9%	15	94%	8	62%	9	35%
	Benner's Carnegie Report	3	8%	1	4%	2	13%	0	0%	3	12%
	Institute of Medicine Report	11	28%	8	35%	3	19%	2	15%	9	35%
	NLN Education Competency Model	16	41%	11	48%	5	31%	5	38%	11	42%
	Nursing Theorist / Other Model	7	18%	5	22%	2	13%	0	0%	7	27%
	QSEN (Quality Safety Essentials in Nursing)	28	72%	16	70%	12	75%	11	85%	17	65%
	Other	3	8%	3	13%	0	0%	0	0%	3	12%
	<b>Responded to the question</b>	<b>39</b>		<b>23</b>		<b>16</b>		<b>13</b>		<b>26</b>	

In both 2014 and 2016, the most frequently reported other framework used to guide professional staff development among practice organizations was the Joint Commission / National Patient Safety Goals followed by the Nursing Department's Professional Practice Model (with the Institute of Medicine Report tied here in 2016). However, it should be noted that there were wide variations in use of various other frameworks according to organization type (academic medical center or hospital versus community hospital and sector (for-profit versus non-profit). As explained earlier, because of the small number of responses, statistical significance for these differences cannot be calculated, but the nature of the variations could be very useful in tailoring outreach initiatives to specific organizations.

**Table 11: What other framework(s) does your organization use to guide professional staff development? (Choose all that apply)**

		Total Prac. Org.		Aca. Med. Ctr. Or Hosp.		Community Hospital		For-Profit		Non-Profit	
		#	%	#	%	#	%	#	%	#	%
2014	Benner's Carnegie Report	8	20%	5	38%	3	11%	1	33%	7	19%
	CMS	23	58%	6	46%	17	63%	3	100%	20	54%
	DPH/DMH	19	48%	6	46%	13	48%	2	67%	17	46%
	Institute of Medicine Report	24	60%	8	62%	16	59%	1	33%	23	62%
	Joint Commission/National Patient Safety Goals	36	90%	10	77%	26	96%	3	100%	33	89%
	Nursing Department's Professional Practice Model	27	68%	12	92%	15	56%	2	67%	25	68%
	Nursing theorist/other model	17	43%	6	46%	11	41%	2	67%	15	41%
	QSEN (Quality Safety Essentials in Nursing)	10	25%	5	38%	5	19%	1	33%	9	24%
	Other	3	8%	2	15%	1	4%	1	33%	2	5%
<b>Responded to Question</b>		<b>40</b>		<b>13</b>		<b>27</b>		<b>3</b>		<b>37</b>	
2016	Benner's Carnegie Report	13	28%	6	30%	7	26%	3	38%	10	26%
	CMS	23	49%	13	65%	10	37%	4	50%	19	49%
	DPH/DMH	23	49%	11	55%	12	44%	4	50%	19	49%
	Institute of Medicine Report	25	53%	9	45%	16	59%	4	50%	21	54%
	Joint Commission/National Patient Safety Goals	37	79%	15	75%	22	81%	7	88%	30	77%
	Nursing Department's Professional Practice Model	25	53%	10	50%	15	56%	3	38%	22	56%
	Nursing theorist/other model	20	43%	5	25%	15	56%	4	50%	16	41%
	QSEN (Quality Safety Essentials in Nursing)	12	26%	6	30%	6	22%	2	25%	10	26%
	Other	2	4%	2	10%	0	0%	0	0%	2	5%
<b>Responded to Question</b>		<b>47</b>		<b>20</b>		<b>27</b>		<b>8</b>		<b>39</b>	

Tables 12 and 13 show what respondents think would be productive methods for increasing the incorporation of the NOFNCC/RN at their institution or organization. In both 2016 and 2014 the top responses from academic respondents were the same: workshops/educational sessions followed by an implementation toolkit. However, as with other questions, there is a great deal of variance in the responses according to institution type and sector. For example, in 2016, 71% of the 4-year college / university respondents indicated a webinar would facilitate incorporation compared to 35% of respondents from 2-year colleges. These differences could be useful for guiding outreach efforts.

**Table 12: How can (further) incorporation of the NOFNCC/RN into your school be facilitated? Please choose up to three options that you think would be most likely to facilitate incorporation.**

		Total Aca. Inst.		2-Year Coll		4 Yr Coll/Univ		Private		Public	
		#	%	#	%	#	%	#	%	#	%
2014	An Implementation Toolkit	13	59%	4	44%	9	69%	6	75%	7	50%
	Consultation / Technical Assistance	5	23%	2	22%	3	23%	0	0%	5	36%
	Leadership Consensus Building	2	9%	1	11%	1	8%	1	13%	1	7%
	Regional Meetings	8	36%	3	33%	5	38%	2	25%	6	43%
	Webinar	8	36%	1	11%	7	54%	3	38%	5	36%
	Workshops / Educational Sessions	18	82%	7	78%	11	85%	5	63%	13	93%
	Other	3	14%	1	11%	2	15%	1	13%	2	14%
	<b>Responded to the question</b>	<b>22</b>		<b>9</b>		<b>13</b>		<b>8</b>		<b>14</b>	

**Table 12: How can (further) incorporation of the NOFNCC/RN into your school be facilitated? Please choose up to three options that you think would be most likely to facilitate incorporation. - Continued**

2016	An Implementation Toolkit	23	68%	13	65%	10	71%	8	73%	15	65%
	Consultation / Technical Assistance	8	24%	7	35%	1	7%	3	27%	5	22%
	Leadership Consensus Building	5	15%	3	15%	2	14%	2	18%	3	13%
	Regional Meetings	8	24%	5	25%	3	21%	1	9%	7	30%
	Webinar	17	50%	7	35%	10	71%	7	64%	10	43%
	Workshops / Educational Sessions	27	79%	18	90%	9	64%	6	55%	21	91%
	Other	1	3%	0	0%	1	7%	0	0%	1	4%
	<b>Responded to the question</b>	<b>34</b>		<b>20</b>		<b>14</b>		<b>11</b>		<b>23</b>	

The 2016 results for practice institutions had the same top two options for facilitating implementation as academic institutions: workshops/educational sessions followed by an implementation toolkit. However, their 2014 results were somewhat different with an implementation toolkit being the top choice for facilitating further implementation and workshops/educational sessions being second. As seen with other questions, this variance could be an indicator of practice organizations being at a different/earlier stage of their adoption than academic institutions.

**Table 13: How can (further) incorporation of the NOFNCC/RN or NOFNCC/LPN into your organization / work setting be facilitated? Please choose up to three options that you think would be most likely to facilitate incorporation.**

		Total Prac. Org.		Aca. Med. Ctr. Or Hosp.		Community Hospital		For-Profit		Non-Profit	
		#	%	#	%	#	%	#	%	#	%
2014	An Implementation Toolkit	32	80%	10	83%	22	79%	3	100%	29	78%
	Consultation / Technical Assistance	11	28%	1	8%	10	36%	0	0%	11	30%
	Leadership Consensus Building	20	50%	8	67%	12	43%	0	0%	20	54%
	Regional Meetings	8	20%	1	8%	7	25%	1	33%	7	19%
	Webinar	22	55%	5	42%	17	61%	0	0%	22	59%
	Workshops / Educational Sessions	26	65%	7	58%	19	68%	0	0%	26	70%
	Other	2	5%	2	17%	0	0%	0	0%	2	5%
	<b>Responded to Question</b>	<b>40</b>		<b>12</b>		<b>28</b>		<b>3</b>		<b>37</b>	
2016	An Implementation Toolkit	29	67%	10	59%	19	73%	5	63%	24	69%
	Consultation / Technical Assistance	11	26%	5	29%	6	23%	0	0%	11	31%
	Leadership Consensus Building	14	33%	5	29%	9	35%	4	50%	10	29%
	Regional Meetings	13	30%	4	24%	9	35%	2	25%	11	31%
	Webinar	10	23%	4	24%	6	23%	1	13%	9	26%
	Workshops / Educational Sessions	33	77%	13	76%	20	77%	6	75%	27	77%
	Other	3	7%	2	12%	1	4%	0	0%	3	9%
	<b>Responded to Question</b>	<b>43</b>		<b>17</b>		<b>26</b>		<b>8</b>		<b>35</b>	

Table 14 shows the results of the 2016 additional questions regarding familiarity with the NOFNCC/LPN. The first aspect of the table one should note is the number/percentage of academic institutions (41%) and practice organizations (46%) which do not have LPN programs or do not hire LPNs. The LPN competencies were developed in the academic arena and have only recently been introduced into the practice arena. This is reflected in the data with respondents from academic institutions reporting higher rates of implementation and familiarity than respondents from practice organizations.



Table 14: Is your school / organization / work setting familiar with the NOFNCC/LPN?

	2016								
	Yes, we are familiar with them and are implementing them .		Yes, we are familiar with them, but have not yet begun implementation.		No, we are not familiar with them.		Our school does not have an LPN program. / My organization / work setting does not employ LPNs.		Total
	# Responses	%	# Responses	%	# Responses	%	# Responses	%	# Responses
<b>Academic Institutions</b>	<b>16</b>	<b>43%</b>	<b>5</b>	<b>14%</b>	<b>1</b>	<b>3%</b>	<b>15</b>	<b>41%</b>	<b>37</b>
2-Year College	9	24%	4	11%	1	3%	7	19%	21
4-Year College / University	7	19%	1	3%	0	0%	7	19%	15
Private Institution	3	8%	2	5%	0	0%	7	19%	12
Public Institution	13	35%	3	8%	1	3%	8	22%	25
<b>Practice Organizations</b>	<b>11</b>	<b>30%</b>	<b>11</b>	<b>30%</b>	<b>6</b>	<b>16%</b>	<b>17</b>	<b>46%</b>	<b>45</b>
Academic Medical Center or Hospital	3	8%	6	16%	1	3%	8	22%	18
Community Hospital	8	22%	5	14%	5	14%	9	24%	27
For-Profit Organization	1	3%	2	5%	2	5%	3	8%	8
Non-Profit Organization	10	27%	9	24%	4	11%	14	38%	37